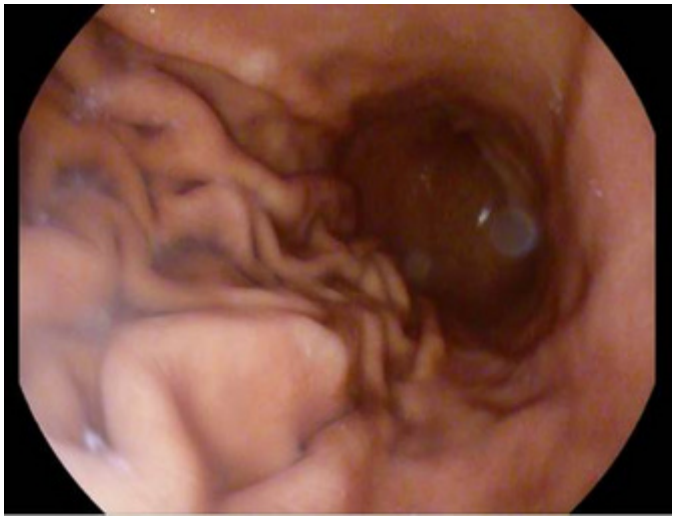
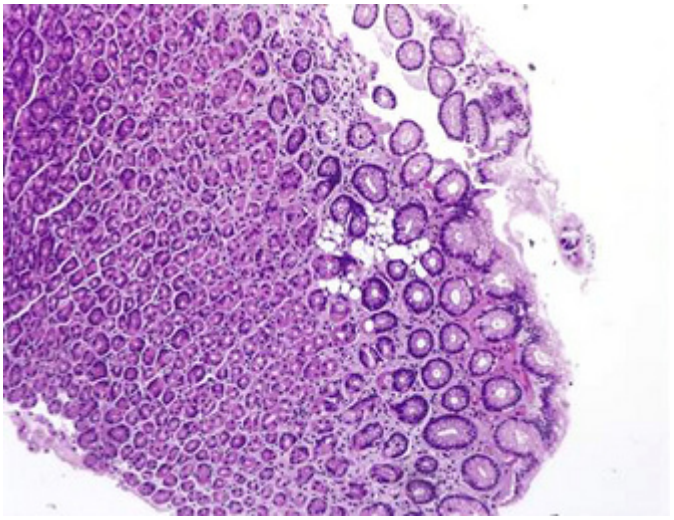
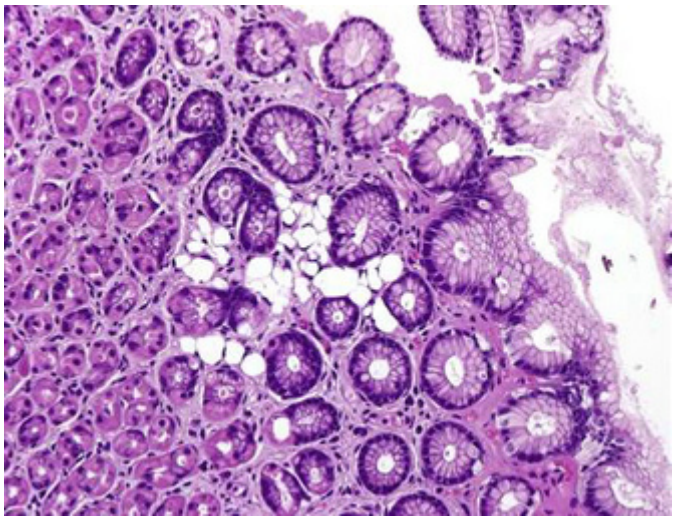
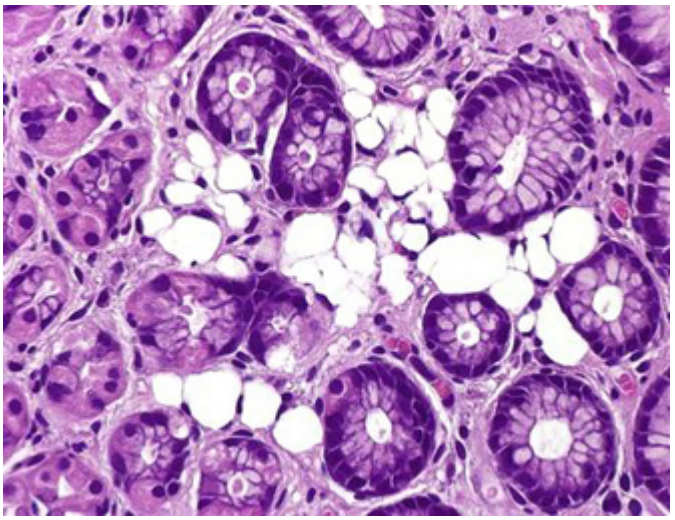
March 2018

Gastric biopsy in a 49-year-old female patient with dyspeptic syndrome.

What is your diagnosis?

Diagnosis:

Gastric pseudolipomatosis.

Comment:

A 49–year–old female patient with dyspeptic syndrome was submitted to endoscopic examination of the upper gastrointestinal tract. The endoscopic aspect of the gastric mucosa was normal (Panel A), without any obvious lesion, and one biopsy was taken from gastric body.

Upon histologic examination, there was no evidence of gastritis. We found only some clear open spaces in the lamina propria, without epithelial or endothelial cell lining, favouring the diagnosis of gastric pseudolipomatosis (Panels B-D).

Differential diagnoses presenting with similar morphology include lymphangiomatous and true lipomatous lesions, both of which can easily be excluded by using appropriate immunohistochemical (IHC) stains (CD 31, CD 34, and D2-40 for the detection of endothelial cells and S100 for adipose tissue).

Regarding the presented case, we performed immunohistochemical stains for CD 34 and S100, both of which were negative, confirming the diagnosis of pseudolipomatosis.

Endoscopically, pseudolipomatosis may be an incidental finding in normal mucosa (as in our case) or present as a single or multiple raised plaques, white to yellow in colour. It is a benign transient lesion, characterized histologically by aggregates of vacuolated spaces, present within the lamina propria, usually measuring from 20 to 240 µm.

The lesion is named gastrointestinal pseudolipomatosis because it resembles fatty infiltration. As mentioned above, a negative S100 stain is very useful for differential diagnosis.

Pseudolipomatosis may be encountered in all parts of the gastrointestinal tract, most commonly within the large bowel. In this location, the lesion is believed to result from influx of air into the mucosa secondary to endoscopy-related trauma. Within the stomach, the pathogenesis is less clear. Remarkably there is a strong association with autoimmune atrophic gastritis (compare ENGIP Case June 2013, Panel G), and local gas production by certain strains of bacteria (inside the gastric mucosa) has been discussed as possible etiological mechanism.

Recognition of this peculiar lesion is important to pathologists because it might be mistaken for other, including neoplastic lesions, such as true lipomas, but also signet ring cell carcinoma.

For further reading:

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Presented by:

Corina MEHOTIN, Mircea DICULESCU and Gabriel BECHEANU, Bucharest, Romania.